

Nika Adham, et al.
Serial No.: 09/116,676
Filed: July 16, 1998
Page 2

timely filed.

Please amend the subject application as follows:

In the Title:

Please delete the current title and insert --METHODS OF IDENTIFYING OR SCREENING FOR AGENTS THAT BIND THE OB-Re --.

In the Claims:

Please cancel claims 71, 210-212 and 215-217 without prejudice or disclaimer to applicants' right to pursue the subject matter of these claims in a continuation or divisional application.

Please amend claims 208, 209, 213, 214, 218, 221 and 222 without prejudice or disclaimer as follows:

In claim 208, please delete "71" and insert - 224 -.

In claim 209, please delete "71" and insert - 224 -.

In claim 213, please delete "212" and insert - 226 -.

In claim 214, please delete "212" and insert -- 226 -.

In claim 218, please delete "217" and insert -- 228 -.

In claim 221, please delete "71, 208, 209, 210, 211, 212, 213, 214, 215 or 216" and insert - 224, 208, 209, 225, 226, 213, 214

Nika Adham, et al.
Serial No.: 09/116,676
Filed: July 16, 1998
Page 3

or 227 -.

✓ In claim 222, please delete "71, 208, 209, 210, 211, 212, 213, 214, 215 or 216" and insert -- 224, 208, 209, 225, 226, 213, 214 or 227 --.

Please add new claims 224 to 228 as follows:

-224. (New) A process for determining whether a chemical compound specifically binds to:

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- (a) a soluble polypeptide comprising consecutive amino acids, the amino acid sequence of which is shown in Figure 5 (SEQ ID NO: 10);
 - (b) a soluble polypeptide having a sequence which varies therefrom by no more than 15 amino acids, such variations:
 - (i) not involving amino acids corresponding to the amino acids at positions 799-804 of the amino acid sequence shown in Figure 5 (SEQ ID NO: 10); and
 - (ii) not changing the functional properties of the soluble polypeptide; or
 - (c) a soluble polypeptide comprising the soluble polypeptide of (a) or (b) linked to consecutive amino acids corresponding to a flag epitope,
- C1

which comprises contacting the soluble polypeptide of (a), (b) or (c) above with the compound under conditions suitable for binding, and detecting specific binding of the chemical compound to the soluble polypeptide.--

--225. (New) The process of claim 224, wherein the soluble polypeptide comprises consecutive amino acids, the amino acid sequence of which is shown in Figure 5 (SEQ ID NO: 10) --

--226. (New) A process involving competitive binding for determining whether a first chemical compound specifically binds to:

- (a) a soluble polypeptide comprising consecutive amino acids, the amino acid sequence of which is shown in Figure 5 (SEQ ID NO: 10);
- (b) a soluble polypeptide having a sequence which varies therefrom by no more than 15 amino acids, such variations:
 - (iii) not involving amino acids corresponding to the amino acids at positions 799-804 of the amino acid sequence shown in Figure 5 (SEQ ID NO: 10); and
 - (iv) not changing the functional properties of the soluble polypeptide; or
- (c) a soluble polypeptide comprising the soluble polypeptide of (a) or (b) linked to consecutive amino acids corresponding to a flag epitope,

which comprises separately contacting the soluble polypeptide of (a), (b) or (c) above, with both the first chemical compound and a second chemical compound known to bind to the soluble polypeptide, and with only the second chemical compound, under conditions suitable for binding of both the first and second compounds, and detecting specific binding of the first chemical compound to the soluble polypeptide, a decrease in the binding of the second chemical compound to the soluble polypeptide in the presence of the first chemical compound indicating that the first chemical compound binds to the soluble polypeptide.--

--227. (New) The process of claim 226, wherein the soluble polypeptide comprises consecutive amino acids, the amino acid sequence of which is shown in Figure 5 (SEQ ID NO: 10).--

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--228. (New) A method of screening a plurality of chemical compounds not known to bind to:

(a) a soluble polypeptide comprising consecutive amino acids, the amino acid sequence of which is shown in Figure 5 (SEQ ID NO: 10);

(b) a soluble polypeptide having a sequence which varies therefrom by no more than 15 amino acids, such variations:

(v) not involving amino acids corresponding

to the amino acids at positions 799-804
of the amino acid sequence shown in
Figure 5 (SEQ ID NO: 10); and

(vi) not changing the functional properties
of the soluble polypeptide; or

(c) a soluble polypeptide comprising the soluble
polypeptide of (a) or (b) linked to
consecutive amino acids corresponding to a
flag epitope,

to determine whether a compound specifically binds to the
soluble polypeptide of (a), (b) or (c) which comprises:

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- (1) preparing a cell extract or cell supernatant from
cells transfected with and expressing DNA encoding
the soluble polypeptide and contacting the cell
extract or cell supernatant with a compound known
to bind specifically to the soluble polypeptide;
 - (2) contracting the preparation of step (1) with the
plurality of compounds not known to bind
specifically to the soluble polypeptide, under
conditions permitting binding of compounds known
to bind the soluble polypeptide;
 - (3) determining whether the binding of the compound
known to bind to the soluble polypeptide is
reduced in the presence of the compounds, relative